

KURNOSOVA, N.A.; BONDARENKO, V.A.; RAKHMAN, E.Z.; YAVRUMOV, V.A.; KIRYUSHINA, L.A.; MANOLOVA, E.P.; ESSEL', A.Ye.; TARASOVA, M.A.; PIROGOVA, A.I.; PIROGOV, I.Ya.; AKOPYAN, R.A.; BABUNASHVILI, N.P.; PROTSENKO, O.A.; PUNSKAYA, I.G.; BURMISTROVA, O.G.; POGOREL'SKAYA, S.A.; D'YACHENKO, T.F.; TOPURIYA, I.I.; MATABELI, G.V.; GIGITASHVILI, M.S.; VACHNADZE, T.G.; MAZURIN, N.D.; NABIYEV, E.G.; BLOKHOV, V.P.

Abstracts. Zhur. mikrobiol., epid. i immun. 41 no.4:142-147  
Ap '64. (MIRA 18:4)

1. Moskovskiy institut epidemiologii i mikrobiologii (for Kurnosova). 2. Faleshtskaya rayonnaya bol'nitsa Moldavskoy SSR i Vinnitskiy meditsinskiy institut imeni Pirogova (for Bondarenko). 3. Stavropol'skiy institut v'etsin i syvorotok (for Rakhman). 4. Kaluzhskiy oblastnoy ot'del zdravookhraneniya (for Yavrumov, Kiryushina). 5. Donetskii meditsinskiy institut (for Manolova). 6. Tbilisskaya rayonnaya imeni 26 komissaro sanitarno-epidemiologicheskaya stantsiya (for Akopyan, Babunashvili). 7. Kemerovskiy meditsinskiy institut (for Protsenko). 8. Turkmen-skiy meditsinskiy institut (for Punskeya, Burmistroya). 9. Gor'-kovskiy institut epidemiologii i mikrobiologii i Gor'kovskaya rayonnaya sanitarno-epidemiologicheskaya stantsiya (for Pogorel'skaya, D'yachenko). 10. Institut meditsinskoy parazitologii i tropicheskoy meditsiny imeni Virsaladze Ministerstva zdravookhraneniya Gruzinskoy SSR (for Topuriya, Matabeli, Gigitashvili, Vachnadze). 11. Kazanskiy institut usovershenstvovaniya vrachey (for Nabiyeu).

YAVRUMOV, S.A.

Some epidemiological characteristics of infections in children  
in Kaluga Province. Zhur. mikrobiol., epid. i immun. 41 no.9:  
16-21 S '64. (MIRA 18:4)

1. Kaluzhskiy oblastnoy otдел zdravookhraneniya.

YAVRUYAN, Kh. K., Cand Tech Sci -- (diss) "Rational conditions of performance of acidic lead cell batteries." Gor'kiy, 1960. 9 pp; (Ministry of Higher and Secondary Specialist Education RSFSR, Gor'kiy Polytechnic Inst im A. A. Zhdanov); 200 copies; price not given; (KL, 18-60, 153)

9.2530

S/194/62/000/002/012/096  
D230/D301

AUTHORS: Yavruyan, Kh. K. and Kireyev, V. T.

TITLE: Applying a magnetic amplifier in a constant current/  
constant voltage stabilizer

PERIODICAL: Referativnyy zhurnal, Avtomatika i radioelektronika,  
no. 2, 1962, abstract 2-2-11k (Tr. Kazansk. aviats.  
in-ta, 1960, no. 59, 55-62)

TEXT: Stabilization of current and voltage is considered in a rec-  
tifying system connected in parallel with an accumulator, in the  
output circuit of which is the magnetic amplifier. The stabilizer  
has two amplifying stages: The first is a d.c. electronic ampli-  
fier, the second a single-cycle, choke-coupled amplifier with a dif-  
ferential output. The stabilizer works in stabilized regimes of cur-  
rent and voltage. The power supply is from an a.c. mains at a com-  
mercial frequency. The problem of an automatic regulation of cur-  
rent and voltage at the output of a magnetic amplifier is investi-  
gated. 4 figures. [Abstracter's note: Complete translation.]

Card 1/1

YAVRYAN, V.A.

Some perturbations of self-adjoint operators. Dokl. AN Arm.SSR 38 no.1:  
3-7 '64. (MIRA 17:4)

1. Odesskiy inzhenerno-stroitel'nyy institut i Yerevanskiy gosudarst-  
vennyy universitet. Predstavleno akademikom AN Armyanskoy SSR M.M.  
Dzhrbashyanom.

YAVRYAN, V.A.

Function of the spectral shift for Sturm - Louville operators.  
Dokl. AN Arm. SSR 38 no.4:193-198 '64. (MIRA 17:6)

1. Yerevanskiy gosudarstvennyy universitet. Predstavleno  
akademikom AN Armyanskoy SSR M.M.Dzhrbashvanom.

YAVRYAN, V.A.

Trace formula for Sturm-Liouville operators. Dokl. AN Arm. SSR  
41 no.1:14-21 '65. (MIRA 18:8)

1. Yerevanskiy gosudarstvennyy universitet. Submitted February  
25, 1965.

ACC NR: AP7005422

SOURCE CODE: UR/0020/66/169/001/0049/0051

YAVRYAN, V. A. (Yerevan State University (Yerovanskiy gosudarstvennyy universitet)

"Regularized Trace of the Difference Between Two Singular Sturm-Liouville Operators"

Moscow, Doklady Akademii Nauk SSSR (Proceedings, Academy of Sciences USSR), Vol. 169, No. 1, 1966, pp 49-51

Abstract: This paper is a follow-up to the work of M. G. Krein (Matematicheskiy Sbornik, Vol. 33 (75), No. 3 (1953); Doklady Akademii Nauk SSSR, Vol. 151, No. 5 (1963) and concerns the Gel'fand-Levitan equation for the sum of the differences of the eigenfunctions of two regular Sturm-Liouville operators. Analogs of these equations for certain singular Sturm-Liouville operators are also considered. This paper was presented by Academician N. N. Bogolyubov on 27 September 1965. Orig. art. has: 11 formulas. [JPRS: 38,695]

TOPIC TAGS: mathematic operator, mathematics

SUB CODE: 12 / SUBM DATE: 10Sep65 / ORIG REF: 014

Card 1/1

UDC: 517.94



*YAVTUSHENKO, I.N.*

YAVTUSHENKO, I.N., fel'dsher (Poltavskaya oblast')

Valuable handbook. (Review of "Brief manual on medicinal preparations.")

Fel'd. 1 akush. no.2:62 F '55.

(MLRA 8:4)

(PHARMACOLOGY--HANDBOOKS, MANUALS, ETC.)

YAVTUSHENKO, I.N.

Work of pharmaceutic centers. Apt.delo 4 no.2:37-38 Mr-Ap '55.  
(MLRA 8:5)

1. Zaveduyushchiy Khalturinskim aptechnym punktom.  
(PHARMACY,  
in Russia, rural)  
(RURAL CONDITIONS,  
rural pharm..in Russia)

YAVTUSHENKO, I.N.

ZHELDAK, B.G., fel'dsher (Smolevichi Minskoy oblasti) DURMANENKO, I.V.  
fel'dsher (Prudishchi Vladimirovskoy oblasti) YAVTUSHENKO, I.N.  
SAUTIN, I.G., fel'dsher (Mogilevskoy oblasti)

How I improve my professional qualifications and broaden my  
ideological and political outlook; from articles submitted for  
the contest. Fel'd. 1 akush. no.6:55-58 Je '55. (MLRA 8:8)

1. Khalturinskaya sel'skaya bol'nitsa Poltavskoy oblasti (for  
Yavtushenko).  
(Nurses and nursing)

YAVTUSHENKO, I.N., fel'dsher

"Clinical symptoms and first aid in occupational poisonings."

I.IA.Sosnovik. Reviewed by I.N.Iavtushenko. Fel'd. i akush. 21  
no.2:63 F '56.

(MIRA 9:5)

1. Khalturinskaya sel'skaya bol'nitsa.

(INDUSTRIAL TOXICOLOGY)

(FIRST AID IN ILLNESS AND INJURY)

(SOSNOVIK, IL'IA YAKOVLEVICH)

YAVTUSHENKO, I.N., fel'dsher (selo Khalturino Poltavskoy oblasti)

Kerosene poisoning in a child. Fel'd. i akush. 23 no.8:46-47  
Ag '58 (MIRA 11:9)  
(KEROSENE--TOXICOLOGY)

EXCERPTA MEDICA Sec 17 Vol 5/9 Public Health Sept 59

2554. PREVENTION OF TICK ENCEPHALITIS IN THE TOMSK AREA (Russian text) - Yavya A. R. - TRUDY TOMSK. INST. VAKTS. I SYVOR. 1956, 7 (127-131)

The tick *Ixodes persulcatus* is the only vector of the disease in the area. It inhabits mostly marshy fields with shrubs and bushes, pine forests with grassy undergrowth and cedar woods. Natural reservoirs of the virus are made up mainly by herd vole, field hamster, shrew-mouse, common vole and forest mouse. Systematic preventive measures were first instituted in 1951. It is pointed out that extermination of adult ticks should be the main step in the prevention of encephalitis. This is effected by the treatment of cattle, sheep etc. with DDT powder over a period of 2-3 yr. As a result the biological processes concerned with the reproduction of the tick population are interfered with so much that a great reduction of their numbers follows. (S)

*Yev'ya, H.K.*  
KARPOV, S.P.; POPOV, V.M.; SHIPOVA, A.A.; YAV'YA, A.R.; LAPTEVA, K.Ya.

Materials on eradicating an endemic center of tick-borne encephalitis.  
Vop.virus. 1 no.6:55-58 H-D '56 (MIRA 11:3)  
(ENCEPHALITIS, EPIDEMIC, prev. and control  
in Russia, extermination of ticks in newly acquired areas)

YAV'YA, A.B.

Seroprophylaxis of tick-borne encephalitis. Vop.virus. 4 no.6:686-  
689 N-D '59. (MIRA 13:3)

1. Tomskiy nauchno-issledovatel'skiy institut vaktsin i syvorotok.  
(ENCEPHALITIS EPIDEMIC prev. & contrl)  
(IMMUNE SERUMS)



YAV'YA, H.K.

TABLE 1 BOOK CITATION 807/1146

Total. Bacterio-physiological Institute vialia 1 syrovok  
Trend, vol 11 (Proceedings of the Young Scientific Research Institute of Vascular  
and Serum, Vol. 11) Tashkent, 1960. 327 p. 1,700 copies  
printed.

Editorial Board: B.G. Gulbanyan (Chair, M.I. Director of the Young Scientific  
Research Institute of Vascular and Serum) B.G. Gulbanyan (Chair, M.I. Professor)  
D. I. Dzhirgen (Secretary), M.A. Mavrikanov, and V.M. Popov (Secretary), 1958.  
M. A. G. G. G. G.

NOTES: This collection of articles is intended for biologists, physicians,  
and medical personnel.

CONTENTS: The collection contains 10 papers on problems of epidemiology and micro-  
biology and 5 papers on the theory and practice of immunology. To avoid  
repetition of material on the value of contents the following  
articles will be abbreviated. Young bacterio-physiological Institute  
vialia 1 syrovok (Young Scientific Research Institute of Vascular and Serum)  
as "Young Institute". Young medical laboratory as "Young Medical Institute",  
Young bacteriological laboratory as "Young Bacteriological Institute" (Department of Micro-  
biology of the Young Medical Institute) as "Young Department of Microbiology".

1. Gulbanyan, B.G., and M.A. Mavrikanov (Young Institute).  
Characteristics of the Young Institute of Vascular and Serum. 25
2. Gulbanyan, B.G., and M.A. Mavrikanov (Young Institute).  
Characteristics of the Young Institute of Vascular and Serum. 25
3. Gulbanyan, B.G., and M.A. Mavrikanov (Young Institute).  
Characteristics of the Young Institute of Vascular and Serum. 25
4. Gulbanyan, B.G., and M.A. Mavrikanov (Young Institute).  
Characteristics of the Young Institute of Vascular and Serum. 25
5. Gulbanyan, B.G., and M.A. Mavrikanov (Young Institute).  
Characteristics of the Young Institute of Vascular and Serum. 25
6. Gulbanyan, B.G., and M.A. Mavrikanov (Young Institute).  
Characteristics of the Young Institute of Vascular and Serum. 25
7. Gulbanyan, B.G., and M.A. Mavrikanov (Young Institute).  
Characteristics of the Young Institute of Vascular and Serum. 25
8. Gulbanyan, B.G., and M.A. Mavrikanov (Young Institute).  
Characteristics of the Young Institute of Vascular and Serum. 25
9. Gulbanyan, B.G., and M.A. Mavrikanov (Young Institute).  
Characteristics of the Young Institute of Vascular and Serum. 25
10. Gulbanyan, B.G., and M.A. Mavrikanov (Young Institute).  
Characteristics of the Young Institute of Vascular and Serum. 25
11. Gulbanyan, B.G., and M.A. Mavrikanov (Young Institute).  
Characteristics of the Young Institute of Vascular and Serum. 25
12. Gulbanyan, B.G., and M.A. Mavrikanov (Young Institute).  
Characteristics of the Young Institute of Vascular and Serum. 25
13. Gulbanyan, B.G., and M.A. Mavrikanov (Young Institute).  
Characteristics of the Young Institute of Vascular and Serum. 25
14. Gulbanyan, B.G., and M.A. Mavrikanov (Young Institute).  
Characteristics of the Young Institute of Vascular and Serum. 25
15. Gulbanyan, B.G., and M.A. Mavrikanov (Young Institute).  
Characteristics of the Young Institute of Vascular and Serum. 25
16. Gulbanyan, B.G., and M.A. Mavrikanov (Young Institute).  
Characteristics of the Young Institute of Vascular and Serum. 25
17. Gulbanyan, B.G., and M.A. Mavrikanov (Young Institute).  
Characteristics of the Young Institute of Vascular and Serum. 25
18. Gulbanyan, B.G., and M.A. Mavrikanov (Young Institute).  
Characteristics of the Young Institute of Vascular and Serum. 25
19. Gulbanyan, B.G., and M.A. Mavrikanov (Young Institute).  
Characteristics of the Young Institute of Vascular and Serum. 25
20. Gulbanyan, B.G., and M.A. Mavrikanov (Young Institute).  
Characteristics of the Young Institute of Vascular and Serum. 25

YAV'YA, A.R.; IGOLKIN, N.I.; FEDOROV, Yu.V.

Materials on the characteristics of the Gur'yevsk focus of  
tick-borne encephalitis. Trudy TomNIIVS 11:52-61 '60. (MIRA 16:2)

(ENCEPHALITIS)  
(KEMEROVO PROVINCE--TICKS AS CARRIERS OF DISEASE)

KARPOV, S.P.; YAV'YA, A.R.

Epidemiology and prevention of tick-borne encephalitis in the  
Tomsk focus in the season of 1957. Trudy TomNIIVS 11:46-51  
'60. (MIRA 16:2)

1. Tomskiy nauchno-issledovatel'skiy institut vaktsin i syvorotok  
i Tomskiy meditsinskiy institut.  
(TOMSK PROVINCE—ENCEPHALITIS)

KARPOV, S.P.; YAV'YA, A.R.

Tick-borne encephalitis in the Tomsk focus during the 1958  
season. Trudy Tom NIIVS 12:18-21 '60 (MIRA 16:11)

1. Tomskiy nauchno-issledovatel'skiy institut vaktsin i  
syvorotok i Tomskiy meditsinskiy institut.

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TRUKHMANOV, B.G.; YAV'YA, A.R.

Reactogenicity and the epidemiological effectiveness of anti-encephalitic vaccine according to its evaluation by public health agencies. Trudy Tom NIIVS 12:22-28 '60  
(MIRA 16:11)

1. Tomskiy nauchno-issledovatel'skiy institut vaktsin i syvorotok.

X

KARPOV, S.P.; YAY'YA, A.R.; KOLMAKOVA, A.G.; VERSHININA, T.A.; FEDOROV,  
Yu.V.; YEROFEYEV, V.S.

Sanitation of the natural focus of tick-borne encephalitis in  
inhabited areas. Med. parazit. i parazit. bol. 32 no.3:292-296  
My-Je'63 (MIRA 17:3)

1. Iz Tomskogo nauchno-issledovatel'skogo instituta vaktsin i  
syvorotok (direktor B.G. Trukhmanov).

*YAVZINA, N. Ye.*  
CHEGODAYEV, D.D.; BUGORKOVA, N.A.; KUZNETSOVA, A.A.; YAVZINA, N.Ye.

On the nature of spherulites in polytrifluorochloroethylene (with  
summary in English. Zhur.fiz.khim. 31 no.9:2061-2065 8 '57.

(Ethylene) (Spherulites)

(MIRA 11:1)

YACHNITSYN, V.G. JAICHNITSYN, V.G.  
 SUBJECT USSR / PHYSICS CARD 1 / 2 PA - 1886  
 AUTHOR JAICHNITSYN, V.G.  
 TITLE A Static Solution of the Nonlinear Meson Equation.  
 PERIODICAL Zurn.eksp.i teor.fis, 31, fasc.6, 1082-1083 (1956)  
 Issued: 1 / 1957

If attention is restricted to static approximation, the equation  $d^2u/dx^2 - (u^3/x^2) - u = 0$  is obtained for the spherical-symmetric case. On this occasion the variables  $x = k_0 r$  and  $u = \sqrt{\lambda} r \phi$  were introduced. The present work determines the asymptotic solution of this equation and furnishes its numerical integration. According to a theorem by HARDY (?) every rational function  $R(x, u, u')$  along the solution  $u(x)$  of a differential equation of the type  $u'' = P(x, u)/Q(x, u)$  is necessarily monotonous. Here  $Q$  and  $P$  denote polynomials with respect to  $u$  and  $x$ . The application of this theorem to the ratio of any two terms of the equation  $Qu' - P = 0$  permits the determination of the asymptotic solution of the differential equation at  $x \rightarrow 0$ . The limiting value of such a ratio can be  $+\infty$ ,  $0$ , or also equal to a constant which is different from zero. At least one ratio must exist in this case, which tends towards a constant value that is different from zero. A similar result can be proved for an equation of the type  $P(u, x)/Q(u, x)$ . A physically interesting solution of the first mentioned differential equation is that which vanishes at  $x \rightarrow \infty$ . The asymptotic behavior of such a solution in the case of great  $x$  can be written down in the form  $u = -g\sqrt{\lambda} e^{-x}$ , where  $g$  denotes an arbitrary constant. The first-named differential equation can, in



Žurn.eksp.i teor.fiz, 31, fasc.6, 1082-1083 (1956) CARD 2 / 2 PA - 1886

the case of short distances, be replaced by the asymptotic equation  $d^2u/dx^2 - u^3/x^2$ . The latter is an analogy to the equation of EMDEN-FOWLER and can be reduced to an equation of the first order, for, by the substitutions  $x = e^{-t}$  and  $y = Du/dt$  one obtains  $dy/du = u^3/y - 1$ . A qualitative investigation of the behavior of the phase trajectories on the plane  $(yu)$  shows that all solutions of the asymptotic equation mentioned as the last but one have a singular point (as a characteristic feature). The position of this point is not fixed, but it depends on the integration constant. By the application of the theorem of HARDY (?) to  $dy/du = u^3/y - 1$ ,  $u = -\sqrt{2/\ln(x/x_k)}$  is obtained for the asymptotic solution in the case of short distances, where  $x_k$  is an arbitrary constant. Further, the equation  $d^2u/dx^2 - (u^3/x^2) - u = 0$  was numerically integrated. This integration extended, beginning with the asymptotic solution, to large distances. To each value of  $g$  there corresponds a certain value of  $x_k$ . According to an attached diagram it is possible to represent the solution obtained in rough approximation by means of the functions  $u = -g\sqrt{\lambda}e^{-x}$  and  $u = -\sqrt{2/\ln(x/x_k)}$ . The author hopes to be able to interpret the results obtained and its application to a two-nucleon system for the case of short distances in the course of a further work.

INSTITUTION: State University Dnepropetrovsk

*X-1000 syn, V.G.*

*NOTE:*

*3 km  
1 km  
1*

YAYES, S.B.

Morphological and functional characteristics of hemopoiesis  
in hypoplastic states. Sbor. trud. L'vov. nauch.-issl. inst.  
perel. krovi i neotlozh. khir. no.4:76-84 '60 (MIRA 16:12)

YAYES, S.B. (L'vov)

Methodology of marrow punctures for animals. Arkh.pat. 20 no.1:  
79-81 '58. (MIRA 13/12)

1. Iz L'vovskogo nauchno-issledovatel'skogo instituta perelivaniya  
krovi (dir. - dotsent D.G. Petrov).  
(MARROW) (HUMERUS—PUNCTURA)

YAYES, S. B.

Comparative data from cytochemical studies of the peripheral blood and bone marrow in leukoses and aplastic states. Probl. gemat. i perel. krovi 7 no.7:43-49 J1 '62. (MIRA 15:7)

1. Iz L'vovskogo instituta perelivaniya krovi i neotlozhnoy khirurgii (dir. - dotsent D. G. Petrov)

(LEUKEMIA) (BLOOD—ANALYSIS AND CHEMISTRY)  
(MARROW)

YAYES, S.B.; KUCHUK, A.P.; KRIVORUCHKO, R.A.; SHIMANSKAYA, B.M.

Transfusion of blood preserved with cation exchangers and its  
erythrocyte mass in hypoplastic states. Sbor. trud. L'vov.  
nauch.-issl. inst. perel. krovi i neotlozh. khir. no.4:  
155-161 '60 (MIRA 16:12)

YAYES, S.B.; NOVIKOVA-DANTSIGER, T.I.; AKIMOVA, R.N.; KRIVORUCHKO, R.A.

State of hemopoiesis and gases of the blood in transfusions  
of blood preserved with cation exchangers following hemorrhages.  
Sbor. trud. L'vov. nauch.-issl. inst. perel. krovi i neotlozh.  
khir.no.4:168-176 '60 (MIRA 16:12)

LYSENKO, T.D.; OL'SHANSKIY, M.A.; SINYAGIN, I.I.; GLUSHCHENKO, I.Ye.;  
VARJUNTSYAN, I.S.; PREZENT, I.I.; SHCHERBINOVSKIY, N.S.; SHUMKOV,  
V.I.; YEVSTIGHEYEV, S.N.; BOCHEVER, A.M.; LITVIN, V.M.; YATKOVA,  
A.T.; PODVOYSKIY, I.I.; SAKS, Ye.I.; KHALIFMAN, I.A.; ~~FETGINSON,~~  
N.I.; SHCHEGLOVA, Yu.N.; DLUGACH, G.V.; STERNIN, R.A.; LISOVSKAYA,  
O.V.; GUBINA, T.I.; ROZENFEL'D, M.I.; TSVETAYEVA, Ye.M.; PARKHO-  
MENKO, Ye.V.; NEYMAN, N.F.

Sofia Iakovlevna Voitinskaia; an obituary. Agrobiologiya no.4:121  
Jl-Ag '58. (MIRA 11:9)  
(Voitinskaia, Sofi'ia Iakovlevna, 1898-1958)



AUTHORS: Bunimovich, S; Kireyev, O; Osonenko, V; Yaylenko, L. SOV-107-58-9-18/38

TITLE: A Club SW Transmitter (Klubnyy KV peredatchik)

PERIODICAL: Radio, 1958, Nr 9, pp 23 - 28 (USSR)

ABSTRACT: The transmitter was designed and built by the authors for use as the Stalino Radio Club's transmitter. It transmits on the SW amateur bands, 80, 40, 20, 14 and 10 m, and can operate with telegraph, microphone and amplitude modulation, or with the microphone on a single side band (SSB), suppressing the carrier wave. The set consists of 3 basic units - final and penultimate transmitting stages, master oscillator and SSB generator - which can work independently or in conjunction with other apparatus. Band changing in the final stage is effected by replacing the coil. Band switching is avoided to reduce RF energy losses. A switch alters the value of the negative feedback to the control grid - for telegraph work 150v, for AM microphone work 130 v and for SSB microphone work 95 v. The triode penultimate stage has automatic bias and a switching system for the band change. The output of the transmitter is not less than 10 w. The master oscillator makes it possible to obtain an RF output voltage up to 50 v. Band change is effected by RF relays. The master generator

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A Club SW Transmitter

SOV-107-58-9-16/38

stage works at a frequency in the 160 m band. Keying is carried out on a triode keyer. A stabilatron is built in to stabilize the plate and screen voltage of the master generator and the screen voltage of the buffer stage. The RF voltage is fed from the master generator via a choke to the grid of the buffer tube. The 1st doubler is tuned to 80m, the 2nd to 14 m with a relay which, by switching in a condenser, retunes it to 40 m. The 3rd doubler is tuned to 14 m, retuned by a relay to 20 m. The final stage is a cathode repeater. The modulator consists of a 4-stage AF-amplifier with a modulation transformer. Automatic level limitation is provided to prevent non-linear distortions. In the SSB generator the AF signal, together with the voltage from the 1st carrier wave generator (465 kc), is fed to the 1st balanced modulator equipped with a single band crystal filter for isolating one sideband. One crystal passes the lower SB (463.5 kc), one the upper SB (466.5 kc) and the other the resonance frequency of 465 kc. The selected sideband passes through an IF amplifying stage to the 2-stage 2nd balanced modulator excited by the master oscillator, operating at 3.0-3.3 MC for 80 and 40 m bands and at 6.75-7.15 Mc for 20, 14 and 10 m bands. The final stage isolates the 4th harmonic in the 10 m band, works as

Card 2/3

A Club SW Transmitter

SOV-107-58-9-18/38

a tripler in the 14 m band, as a doubler in the 20 and 40 m band, and as an amplifier in the 80 m band. The power pack has 5 separate rectifiers. Relays are used extensively to protect the power pack and transmitter from voltage overloading. The transmitter is arranged in 3 separate units sliding in and out of a rack assembly: 1) final and penultimate stages, modulating transformer, 2) 750v and 280v rectifiers, bias and relay rectifiers, 3) 1,500v HT rectifier and filament transformer for gas-discharge rectifiers. Construction and tuning details are given. There are 5 circuit diagrams, 4 tables, 1 figure and 1 schematic diagram.

1. Radio transmitters--Design    2. Radio transmitters--Performance

Card 3/3

BUNIMOVICH, S. (UBSKAB); YAYLENKO, I. (UBSKAB)

Changes in the design of amateur radio transmitters. Radio no.7:  
13-15 J1 '60. (MIRA 13:7)  
(Radio, Shortwave--Transmitters and transmission)

YAYLENKO, L. (UT5AA) (Donetsk)

A word about radio frequency allocation to radio amateurs. Radio  
no.1:12-13 Ja '63. (MIRA 16:1)

(Radio operators)

BUNIMOVICH, Sergey Georgiyevich; YAYLENKO, Leonid Patrovich;  
PROZOROVSKIY, Yu.N., spets. red.; GODINER, F.Ye., red.

[Amateur single-sideband radio communication techniques]  
Tekhnika liubitel'skoi odnopolosnoi radiosvazi. Mo-  
skva, Izd-vo DOSAAF, 1964. 243 p. (MIRA 17:12)

YAYLOYAN, B.A.

Summer planting of cucumbers in southern regions. Kons.1 ov.prom.  
17 no.6:29-30 Je '62. (MIRA 15:5)

1. Kurganinskiy konservnyy zavod.  
(Cucumbers)

YAYLOYAN, B.A.

Green peas culture in the area of the Kurganinsk Canning Plant.  
Kons. i ov.prom. 18 no.3:31-33 Mr '63. (MIRA 16:3)

1. Kurganinskiy konservnyy zavod.  
(Kurganinsk District—Peas)



YAYTSOV, I.I., brigadir; PAVLENKO, I.Ya.; ANTIPOV, V.A.; PETRENKO, Ye.V.,  
kand.tekhn.nauk; RUSIN, D.A., inzh.

Produced 28,082 tons of coal in one month with the "Donbass-1"  
cutter loader. Ugol' Ukr. 6 no.11:9-10 N '62. (MIRA 15:12)

1. Upravlyayushchiy Shakhterskim trestom ugol'nykh predpriyatiy  
kombinata Rostovugol' Ministerstva ugol'noy promyshlennosti  
SSSR (for Pavlenko). 2. Glavnyy inzh. Shakhterskogo tresta  
ugol'nykh predpriyatiy kombinata Rostovugol' Ministerstva  
ugol'noy promyshlennosti SSSR (for Antipov). 3. Zamestitel'  
glavnogo inzhenera Artemovskogo ugol'nogo kombinata (for Petrenko).  
(Donets Basin—Coal mines and mining)

YAZADZHI, A.

RUMANIA, Cultivable Plants - Grains.

Abstr Jour : Ref Zhur - Biol., No 3, 1958, 10707

Author : Pryadchenko, A., Yazadzhii, A., Veltman, V., Dregich, L.,  
Bretan, I., Gologan, I., Dalas, V., Melakrinou, A.,  
Boldya, Ye., Chobotaru, V., Milulya, K.

Instit : Rumanian Academy.

Title : The Best Sorts of Spring Wheat for the Rumanian People's  
Republic.

Orig Pub : Biol., zh. Akad. RNR, 1956, 1, No 1, 147-206

Abstract : The results are given of the comparative testing of spring  
wheat varieties conducted in 1949-1952 on six experimental  
bases, situated in different productive zones of the Rus-  
sian People's Republic.

Card 1/1

YAZADZHI, A.; DREGICH, L. [Dragici, L.]; (BUKHAREST, RUMYNIYA)

Comparing spring barley yields with the yields of dual-purpose  
barley in spring and fall sowing. Agrobiologia no.4:611-612  
Jl-Ag '61. (MIRA 14:7)

(Barley)

YAZADZHI, A. [IAzadji, A.]; BURLOY, G.

Promising winter wheat lines for Rumania. Agrobiologia no.5:  
774-775 S-O '61. (MIRA 14:10)

1. Nauchno-issledovatel'skiy agronomicheskiy institut g.  
Bukharest, Rumyniya.  
(Rumania--Wheat--Varieties)

YAZAN, P. G.

USSR/Biology - Botany

Card 1/1 : Pub. 86 - 28/40

Authors : Yazan, P. G.

Title : Long-leaved juniper on the Terek sands

Periodical : Priroda 43/4, page 113, Apr 1954

Abstract : A description is given of long-leaved juniper trees (*Juniperus oblonga*) found in the sandy soil of the Terek massif, with observations on the geological factors involved in their appearance in that region. One Russian reference (1949). Illustration.

Institution : .....

Submitted : .....

14-57-6-12541

Translation from: Referativnyy zhurnal, Geografiya, 1957, Nr 6,  
p 115 (USSR)

AUTHOR: Yazan, P. G.

TITLE: Forest Planting in the Terek-Kuma Rolling Sands  
(Obleseniye Tersko-Kumskikh bugristykh peskov)

PERIODICAL: Izv. Groznensk. obl. krayev. muzeya, 1956, Nrs 7-8,  
pp 205-210

ABSTRACT: Two types of trees were used in the plantings on the  
Terek-Kuma sands in 1895-1898: fast-growing hybrid  
black poplars (Salix caspica), and stands of firm-  
leafed commercial or fruit-bearing trees: white locust,  
summer oak, white mulberry, oleaster, plum, etc. The  
author proposes a new reforestation plan which takes  
the needs of local grazing into consideration. The  
following sand groups are distinguished: 1) light,  
mobile sands in the process of being covered with  
vegetation; 2) grey sands, already overgrown and  
settled; 3) dark (chernozem-like) friable soils in

Card 1/3

Forest Planting (Cont.)

14-57-6-12541

the arenaceous low plains. When reforestation is undertaken, the first sand group should be withdrawn from general use and placed in the state forest reserve, while the second and third groups should be replanted. Silver and black poplar, willow, oleaster, quince, smoke tree, dog rose, tamarisk, etc. should be used for the reforestation of Terek sands. Crimean and Austrian pine as well as numerous berry bushes and trees can be grown successfully in any ecological condition of the sands. Since small oak and pine seedlings perish when burned, blown down, or cut, their stands should be protected by being planted with fast-growing bushes which thrive in dry regions. They must also be irrigated three or four times a year. In the years of abundant humidity, one or two-year seedlings or grafts of oak, black locust, honey locust, maple, apricot, and oleaster can be planted in the permanent locations (after sands have been stabilized). It is proposed that in a case of barren hilly sands or those developing a vegetable cover, lower areas and lower slopes with highest moisture content should be planted first [Tekhnicheskiiye i plodovo-yagodnyye nasazhdeniya (Commerical and Fruit

Card 2/3

Forest Planting (Cont.)

14-57-6-12541

Tree Plantings), Gayel', A.G., 1952, 1954]. When reforesting sands forming small dunes, it is necessary to plant compact screens, bands or groups of poplars or willows. These should be located on the highest places, where hydrological conditions are most favorable.

Card 3/3

SHUBIN, G.G.; YAZAN, Yu.P.

Organization and management of a moose farm. Trudy Pech.-II.  
gos.zap. no. 7:213-240 '59. (MIRA 15:5)  
(Pechoro-Ilych Preserve--Moose)



YAZAN, Yu.P.

Classification of breeding grounds for beaver in the upper  
Pechora Basin. Trudy Pech.-Il.gos.zap. no.7:241-267 '59.  
(MIRA 15:5)

(Pechora Valley--Beavers)

YAZAN, Yu.P.

Quantitative estimation of beavers in the Pechoro-Ilych Preserve.  
Trudy Pech.-Il.gos.zap. no.7:268-276 '59. (MIRA 15:5)  
(Pechoro-Ilych Preserve—Beavers)

YAZAN, Yu.P.

New movement recorder (actograph) for studying the behavior of  
beavers and how to operate. Trudy Pech.-Il.gos.zap. no.7:277-283  
'59. (MIRA 15:5)

(Beavers)

YAZAN, Yu.P., starshiy nauchnyy sotrudnik

Beavers in the upper Pechora Valley. Trudy Inst. biol. UFAI SSSR  
no.18:153-168 '59. (MIRA 13:8)

1. Pechero-Ilychskiy gosudarstvennyy zapovednik.  
(Pechora Valley--Beavers)

YAZAN, Yu.P.

A new actograph and the method of handling it. Zool.zhur. 39  
no.1:147-150 Ja '60. (MIRA 13:5)

1. Pechora-Ilych State Preserve (settlement of Yaksha,  
Troitsko-Pechora district, Komi A.S.S.R.  
(Biological apparatus and supplies) (Beavers)

SVERDLOV, Ya.G. (Perm'); DUBININ, I.A. (Gor'kiy); YAZAN, Yu.P.

Snowfall following warm weather. Priroda 49 no.5:126-127  
My '60. (MIRA 13:5)

1. Pechoro-Ilychskiy zapovednik, Komi ASSR (for Yazan).  
(Snow)

YAZAN', Yu.P.

Mass destruction of elk. Priroda 49 no.11:107-108 N '60.  
(MIRA 13:11)

1. Pechoro-Ilychskiy gosudarstvennyy zapovednik.  
(Komi A.S.S.R.--Elk)

YAZAN, Yu.P.

Effect of air temperature on the activity of moose during their  
fall and winter migration. Zool. zhur. 40 no.3:469-471 Mr '61.

(MIRA 14:3)

1. Pechora-Ilych State Preserve (Settlement Yaksha, Komi A.S.S.R.).  
(Pechora-Ilych Preserve—Moose)  
(Animals, Habits and behaviour of)  
(Temperature—Physiological effect)



YAZAN, Yu.P. (pos.Yaksha, Troitsko-Pechorskiy rayon, Komi ASSR).

A menace to moose. Priroda 50 no.11:69-71 N '61. (MIRA 14:10)  
(Komi A.S.S.R.—Moose)

YAZAN, Yu.P.

Is marten responsible for the diminishing squirrel population?  
Zool. zhur. 41 no.4:633-635 Ap '62. (MIRA 15:4)

1. Pechora-Ilych State Game Preserve, settl. Yaksha, Komi A.S.S.R.  
(Pechoro-Ilych Preserve--Squirrels) (Martens)

YAZAN, Yu.P.

Morphology and ecology of martens, sables and their hybrid (kidas)  
in the Pechora taiga. Zool.zhur. 41 no.8:1241-1246 Ag '62.

(MIRA 15:9)

1. Pechora-Ilych State Forest Preserve.

(Pechora Valley--Martens) (Pechora Valley--Sables)

BOGAN, F.Ye.; LANINA, L.B.; MEGAL'SKIY, K.O.; SOKOL'SKIY, S.M.;  
YAZAN, Yu.P.; KNORRE, Ye.P.; SOLOV'YEVA, M.Ye., red.;  
OPLESNIN, I.I., tekhn. red.

[Reservation in Pechora; popular science sketch] Zapo-  
vednik na Pechore; nauchno-populiarnyi ocherk. [By]-F.E.  
Bogan i dr. Syktyvkar, Komi knizhnoe izd-vo, 1963. 114 p.  
(MIRA 16:10)

(Pechora Valley--National parks and reserves)

FOGEL'SON, L.I.; YAZHURSKIS, B.I.

Radioelectrocardiography as a method of determining cardiac activity during the performance of work. Kardiologiya 4 no.4: 67-73 J1-Ag ' 64. (MIRA 19: 1 )

1. Terapevticheskaya klinika ( zav. - prof. L.I. Foge''son)  
TSentral'nogo nauchno-issledovatel'skogo instituta ekspertizy  
trudospособnosti i organizatsii truda invalidov (direktor -  
prof. D.I. Gritskevich), Moskva. Submitted August 10, 1963.

KUCHIS, Ye.; YAZBUTIS, T.

Tachometer based on the hall effect. Radio no. 3:26-27 M-164  
(MIRA 17:7)

KUCHIS, Ye., inzh.; YAZBUTIS, T., inzh.

Galvanostat. Radio no. 12:45-46 D '64.

(MIRA 18:3)

FADEYEV, A.S., mashinist; CHOPOROV, F.K., mashinist; YAZOVSKIY, D.D., mashinist

Some observations concerning the design of a.c. locomotives.  
Elek. i tepl. tiaga 7 no.9:13-14 S '63. (MIRA 16:10)

1. Depo Bataysk Severo-Kavkazskoy dorogi.



YAZDOVSKIY, V.I., kand.med.nauk, red.; KRENIG, N.V., red.; SHAPOVALOV,  
V.I., tekhn.red.

[Medical problems in interplanetary flights] Voprosy meditsiny  
pri mezhplanetnykh poletakh; sbornik sokrashchennykh' perevodov  
inostrannoi periodicheskoi literatury. Moskva, Izd-vo inostr.  
lit-ry, 1955. 161 p. (MIRA 12:7)  
(INTERPLANETARY VOYAGES--HYGIENIC ASPECTS)

YAZDOVSKIY, V. (Col) (Medical Service)

"Reconnaissance Scouts of the Cosmos," (Razvedchiki Kosmosa), Sovetskiy Flot, Moscow, No. 245, 16 Oct 1957. p. 4.

Acct. of Soviet Experiments with stratospheric rockets using dogs as passengers

Trans - 1154851

YUGANOV, Ye.M.; KAS'YAN, I.I.; YAZDOVSKIY, V.I.

Muscle tone during weightlessness. Izv. AN SSSR. Ser. biol.  
no. 4:601-606 J1-Ag '60. (MIRA 13:8)

1. Akademiya meditsinskikh nauk SSSR.  
(WEIGHTLESSNESS) (MUSCLE)

YAZDOVSKIY, V.I.; YUGANOV, Ye.M.; KAS'YAN, I.I.

Posture reflex in intact animals during weightlessness. Izv. AN  
SSSR. Ser. biol. no.5:762-767 S-O '60. (MIRA 13:9)

1. Institute of Normal and Pathological Physiology, Academy of  
Medical Sciences of the U.S.S.R., Moscow.  
(WEIGHTLESSNESS)

YAZDOVSKIY, V. I.

- a. Radar Contact with Venus - V. A. Kotelnikov
- b. Some Results of the Constant Geomagnetic Field Measurements Carried Out from Sputnik III over the Territory of the USSR - S. Sh. Dolginov, L. N. Zhurav, N. V. Pustikov, Tyutina, L. O., I. V. Pryaznikov
- c. Some Results of Physiological Reactions to Space Flight Conditions - G. G. Gerasimov, V. Z. Yashkovsky
- d. On The Motion of the Body of the Variable Mass With the Constant Power Consumption in the Gravitational Field - G. L. GROZDOVSKIY, Y. N. Ivanov, V. V. Molodtsov
- e. On The Hardest Solar Corpuscles - V. I. Kravtsovsky
- f. Optimum Contour Heat Rejection Fins Cooled by Radiation - G. L. Grozdovsky
- g. Investigation of Interplanetary Plasma and Planetary Ionospheres by Means of Charged Particle Groups on Space Rockets - K. I. Geringuz
- h. Rocket and Satellite Meteoric Dust Investigations - T. N. Kazarova
- i. On Investigation of Cosmic Radiation on Spaceships-Satellites. - S. N. Vernoy, Y. E. Rosterev, N. F. Eizovenko, I. A. Savenko, P. I. Shavrin. - URBAN-1111

reports to be presented at the XIIth International Astronautical Congress,  
Washington D. C. 1-7 October 1961

(19)

YUGANOV, Ye.M.; KAS'YAN, I.I.; GUROVSKIY, N.N.; KONOVALOV, A.I.;  
YAKUBOV, B.A.; YAZDOVSKIY, V.I.

Sensory reactions and voluntary movements in man under conditions  
of weightlessness. Izv. AN SSSR. Ser.biol. no.6:897-904, N-D '61.  
(MIRA 14:11)

1. Institute of Normal and Pathological Physiology, Academy of  
Medical Sciences of the U.S.S.R., Moscow.  
(WEIGHTLESSNESS)

YAZDOVSKIY, V.I., prof.

Man in outer space. Vest. Vozd. Fl. no.9:56-57 S '61.  
(MIRA 14:11)

(Space flight--Physiological effect)

37201

S/560/61/000/011/007/012  
E027/E635

272400  
AUTHORS:

Zhukov-Verezhnikov, N.N., Mayskiy, I.N.,  
Yazdovskiy, V.I., Pekhov, A.P., Gyurdzhian, A.A.  
Nefed'yeva, N.P., Kapichnikov, M.M., Podoplelov, I.I.,  
Rybakov, N.I., Klemparskaya, N.N., Klimov, V.Yu.,  
Novikov, S.N., Novikova, I.S., Petrov, R.V.,  
Sushko, N.G., Ugryumov, Ye.P., Fedorova, G.I.,  
Zakharov, A.F., Vinogradova, I.N., Chamova, K.G.  
and Buyko, Ye.A. ✓

TITLE:

The results of the first microbiological and  
cytological experiments in Space in Earth satellites

SOURCE:

Akademiya nauk SSSR. Iskusstvennyye sputniki Zemli.  
no. 11. Moscow, 1961. Rezul'taty nauchnykh  
issledovaniy, provedennykh vo vremya poletov vtorogo  
i tret'yego kosmicheskikh korabley-sputnikov, 44 - 67

TEXT:

The authors report the results of their investigations  
of biological objects which had been exposed to space conditions  
in satellite vehicles. The first part of the work was devoted  
to a study of the survival of cells of differing levels of  
organisation under the influence of radiation and other  
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E027/E635

The results of the ---

unfavourable factors, in comparison with control materials which remained in the laboratory over the same period. In experiments with bacteria 2ml. samples of suspensions of *Escherichia coli*, *Aerobacter aerogenes*, *Staphylococcus aureus* and *Clostridium butyricum* containing 500 million organisms or spores per ml. were sealed in ampoules, and exposed to a space flight of unstated duration; the number of viable individuals after the exposure did not differ significantly from the values for the control samples. A similar experiment was carried out with the T2 phage of *E. coli* and the 1521 phage of *A. aerogenes*, which were sent in the second satellite; again, no significant reduction in the titre of the phage preparations could be detected after return from space. Similar results were obtained with preparations of phage sent into space in the fourth and fifth satellites. Two bottles and six tubes of HeLa cells, some of which were saturated with oxygen, were exposed to space flight

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E027/E635

The results of the . . .

conditions, after it had first been shown that vibration and acceleration did not detach the cells from the glass. The cultures without oxygen appeared normal on return, whereas in those exposed to oxygen most of the cells had degenerated. Subculture showed that 90% of the cells, whether detached from or remaining on the glass, were dead; however, two tubes gave good growth, and the cells which grew up showed no abnormalities of morphology. No antigenic differences could be detected in the cells in anaphylaxis and desensitization experiments in guinea-pigs. In subsequent space flights fibroblast and human amnion cell cultures were studied, with similar results. Pieces of human and rabbit skin were also used. On August 12th 1960 two pieces of skin 2.5 x 3.5 cm. in size and 0.5 mm. thick were taken from a human donor, placed in Hanks solution and sent into space in the second satellite. On recovery they were regrafted on the original site in the donor and became firmly attached after seven days.

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The results of the ---

Similar results were obtained with two other donors. An apparatus was devised for making a subculture in space, in order to study the ability of bacteria to multiply under space conditions. In experiments with *Glostridium butylicum* no deviations from the controls were observed. The second part of the work was devoted to a study of possible genetic effects brought about by exposure to space conditions, mainly by looking for the production of auxotrophic mutants and lysogeny in bacteria. The former were detected by inoculation on a layer of minimal medium which was then covered with an overlay of the same medium in order to fix the colonies. When the latter had grown up their position was noted and an overlay of complete medium was then put on, and the colonies which then grew up as a result of the diffusion of essential nutrients were selected as auxotrophic mutants. No such mutants could be found in suspensions of *Escherichia coli* recovered from the second satellite. The experiments on the induction of lysogenic bacteria were carried out on a strain of *E. coli* lysogenized by a  $\lambda$  phage which had been exposed to cosmic

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The results of the ---

S/560/61/000/011/007/012  
E027/E635

radiation in the fifth satellite. Free phage particles were removed by adding phage antiserum; after the end of the latent period the action of the antiserum was cut short by diluting 1:100, streptomycin was added to inhibit the host organisms, and the mixture was plated out on the indicator strain in order to count the phage particles produced. The results obtained, considered in comparison with control experiments, provided no evidence of induction by cosmic radiation during a space flight of ninety minutes. No difference was observed in the plaque morphology. No changes could be detected in the chemical and physical properties of calf thymus deoxyribonucleic acid recovered after a space flight. The results as a whole indicate that no damage was suffered by isolated cells during a brief exposure to space conditions. There are 6 figures and 10 tables. f

SUBMITTED: May 23, 1961

Card 5/5

PARIN, V.V. (Moskva); YAZDOVSKIY, V.I. (Moskva)

Path of Soviet space physiology. Fiziol. zhur. 47 no.10:1217-1226  
0 '61. (MIRA 15:1)  
(SPACE BIOLOGY)

GERD, Mariya Aleksandrovna; GUROVSKIY, Nikolay Nikolayevich;  
YAZDOVSKIY, V.I., prof., otv. red.; YASHKOVA, N.V., red.  
izd-va; GUSEVA, A.P., tekhn. red.

[The first astronauts and the first space scouts] Pervye kos-  
monavty i pervye razvedchiki kosmosa. Moskva, Izd-vo Akad. nauk  
SSSR, 1962. 196 p. (MIRA 15:6)  
(Space flight training)

VOLYNKIN, Yu.M.; YAZDOVSKIY, V.I.; GENIN, A.M.; VASIL'YEV, P.V.;  
 GYURDZHIAN, A.A.; GUROVSKIY, N.N.; GORBOV, F.D.; SERYAPIN,  
 A.D.; BELAY, V.Ye.; BAYEVSKIY, R.M.; ALTUKHOV, G.V.;  
 KOPANEV, V.I.; KAS'YAN, I.I.; YEGOROV, A.D.; SIL'VESTROV,  
 M.M.; SIMPURA, S.F.; TERENT'YEV, V.G.; KRYLOV, Yu.V.; FOMIN,  
 A.G.; USHAKOV, A.S.; DECTYAREV, V.A.; VOLOVICH, V.G.;  
 STEPANTSOV, V.I.; MYASHNIKOV, V.I.; YAZDOVSKIY, V.I.; KASHIN,  
 P.S., tekhn. red.

[First space flights of man; the scientific results of the  
 medicobiological research conducted during the orbital  
 flights of the spaceships "Vostok" and "Vostok-2"] Pervye  
 kosmicheskie polety cheloveka; nauchnyye rezul'taty mediko-  
 biologicheskikh issledovaniy, provedennykh vo vremya orbi-  
 tal'nykh poletov korablei-sputnikov "Vostok" i "Vostok-2."  
 Moskva, Izd-vo Akad. nauk SSSR, 1962. 202 p. (MIRA 15:11)  
 (SPACE MEDICINE) (SPACE FLIGHT TRAINING)

GUREVICH, I.I.[translator]; YAZDOVSKIY, V.I., prof., red.; POPOV,  
I.G., red.; BALDINA, N.P., tekhn. red.

[Problems in space medicine; a collection of articles by  
foreign authors]Voprosy kosmicheskoi meditsiny; sbornik sta-  
tei zarubezhnykh avtorov. Moskva, Medgiz, 1962. 323 p.  
(MIRA 15:9)

(SPACE MEDICINE)



SISAKYAN, N.M., akademik, glav. red.; CHERNICOVSKIY, V.H., akademik, red.; PARIN, V.V., red.; LEBEDINSKIY, A.V., red.; YAZDOVSKIY, V.I., doktor med. nauk, prof., red.; GAZENKO, O.G., doktor biol. nauk, red.; GONCHAROVA, L.S., red. izd-va; POLYAKOVA, T.P., tekhn. red.

[Problems of space biology] Problemy kosmicheskoi biologii.  
Pod red. N.M.Sisakiana. Moskva, Izd-vo Akad. nauk SSSR.  
Vol.1. 1962. 461 p. (MIRA 15:10)

1. Akademiya nauk SSSR. Otdeleniye biologicheskikh nauk.
2. Deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR (for Parin, Lobedinskiy).

(SPACE BIOLOGY)

YAZDOVSKIY, V. I. and GAZULEV, S. A.

"Some Medical and Biological Problems of Manned Space Flight"

report presented at the 13th Intl. Astronautical Federation Congress (IAF)  
Varna, Bulgaria, 23-29 Sep 1962

SISAKYAN, N.M.; PARIN, V.V.; CHERNIGOVSKIY, V.N.; YAZDOVSKIY, V.I.

Some problems of studying and conquering outer space. Probl.  
kosm.biol. 1:5-16 '62. (MIRA 15:12)

(SPACE BIOLOGY)

27 2200

39281

S/216/62/000/001/001/002  
1015/1215

AUTHOR: Yazdovskiy, V. I., Mansurov, A. R., Agadzhanyan, N. A. and Tsivilashvili, A. S.

TITLE: Effect of explosive decompression of pressure overfall on the organism

PERIODICAL: Akademiya nauk. SSSR. Izvestiya. Seriya biologicheskaya, no. 1, 1962, 84-89

TEXT: Experiments were carried out on 15 rats, 21 rabbits and 13 dogs. The pressure overfall was extensive and the speed at which it occurred was 0.004-0.008 sec. Extensive and rapid pressure overfalls resulted in a number of functional and morphologic changes in the internal organs. These changes were particularly marked in the lungs: edema, atelectasis, and hemorrhages into both the parenchyma and pleural cavity were the most prominent features. X-ray observations in the thorax showed that the traumatic changes in the lungs progressed rapidly and caused death of the animals if they were subjected to great and rapid pressure overfall without any compensatory measures. The authors stressed the importance of knowing the etiology, pathology and clinico-morphological picture of pressure overfall. There is 1 figure.

ASSOCIATION: Institut normal'noy i patologicheskoy fiziologii Akademii meditsinskikh nauk SSSR (Institute of Normal and Pathological Physiology, Academy of Medical Sciences, USSR) Moscow

SUBMITTED: May 22, 1961

Card 1/1

27.2200

39282

S/216/62/000/001/002/002

1015/1215

AUTHOR: Yuganov, Ye. M., Kas'yan, I. I. and Yazdovskiy, V. I.

TITLE: The tolerance of animals to shock overloads acting in the direction close to the long axis of the body

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Seriya biologicheskaya, no. 1, 1962, 90-95

TEXT: Freely fastened animals (dogs) were catapaulted with an overload of 20-23 units, in supine, sitting, and standing positions, for 0.1-0.5 seconds. The animals were subjected to a negative overload (direction pelvis-head) in the final stage of the experiment. The soft tissues of the animals, as well as the supporting apparatus, were not affected by the experimental conditions. The catapaulting brought about transient functional changes in the cardio-vascular and respiratory systems, which returned to normal within 4-5 minutes. The results obtained were useful during the planning and performing of the space flight in the second, fourth and fifth space ships — sputniks. There are 4 figures and 2 tables.

ASSOCIATION: Institut normal'noy i patologicheskoy fiziologii Akademii meditsinskikh nauk SSSR (Institute of Normal and Pathological Physiology, Academy of Medical Sciences, USSR) Moscow

SUBMITTED: June 22, 1961

Card 1/1

X

ZHUKOV-VEREZHNIKOV, N.N.; MAYSKIY, I.N.; YAZDOVSKIY, V.I.; PEKHOV, A.P.;  
RYBAKOV, N.I.; KLEMPARSKAYA, N.N.; GYURDZHIAN, A.A.; TRIBULEV,  
G.P.; NEFED'YEVA, H.P.; KAPICHNIKOV, M.M.; PODOPLELOV, I.I.;  
ANTIPOV, V.V.; NOVIKOVA, I.S.; KOP'YEV, V.Ya.

Problems of space microbiology and cytology. Probl.kosm.biol.  
1:118-136 '62. (MIRA 15:12)  
(SPACE MICROBIOLOGY) (CYTOLOGY)

7.

S/865/62/001/000/015/033  
E028/E185

AUTHORS:

Antipov, V.V., Bayevskiy, R.M., Gzenko, O.G.,  
Genin, A.M., Gyurdzhian, A.A., Zhukov-Verazhnikov, N.N.,  
Zhuravlev, B.A., Karpova, L.I., Parfenov, G.P.,  
Seryapin, A.D., Shopelev, Ye.Ya., Yazdovskiy, V.I.

TITLE:

Some results of medical and biological investigations  
in the second and third satellites

SOURCE:

Problemy kosmicheskoy biologii. v.1. Ed. by  
N.M.Sisakyan. Moscow, Izd-vo AN SSSR, 1962. 267-284

TEXT: The maintenance of life conditions is discussed with  
special reference to the second Soviet satellite. During the  
flight the proportion of oxygen in the air of the cabin could be  
maintained at 21 to 24%, whereas the relative humidity rose from  
37 to 47%. The temperature ranged from 16 to 19°C. Water and  
food were provided together in a mixture solidified with agar, in  
order to facilitate automatic dispensing in conditions of weight-  
lessness. This was carried out twice daily by command signals  
from Earth. Telemetric recording of the physiological parameters  
of the dogs Belka and Strelka during space flight showed the

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Some results of medical ...

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occurrence of tachycardia as a result of acceleration, noise and vibration; there was also a rise in the respiration rate: a return to normal pre-flight values occurred during the condition of weightlessness. Movements of the animals were observed by television cameras and also by potentiometric sensors mounted in the harness. No abnormalities were observed in the behavior of the animals after return to earth or during the following 3 months. It was concluded from the experiments carried out in the second satellite that dogs could readily be accustomed to space flight conditions. Genetic changes were noted in the progeny of actinomycetes, plant seeds and fruit flies after return from space flight. The third space satellite contained two dogs (Pcholka and Lushka), two guineapigs, two rats, twenty six mice, fruit flies, seeds and other biological materials which were included in order to study the effects of cosmic radiation. The results are not described.

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GAZENKO, O.G.; YAZDOVSKIY, V.I.; CHERNIGOVSKIY, V.N.

Medicobiological investigations in artificial earth satellites.  
Probl.kosm.biol. 1:285-289 '62. (MIRA 15:12)  
(ARTIFICIAL SATELLITES) (SPACE BIOLOGY—RESEARCH)

S/865/62/001/000/016/033  
E028/E185

AUTHORS: Bakhranov, A.M., and Yazdovskiy, V.I.

TITLE: A sealed capsule for housing animals

SOURCE: Problemy kosmicheskoy biologii, v.1. Ed. by  
N.M. Sisakyan. Moscow, Izd-vo AN SSSR, 1962. 289-298

TEXT: A sealed cabin for housing animals during space flights is illustrated and described. It consists of a cylindrical capsule 64 cm in diameter and 80 cm long, made of 2 mm aluminium sheet and provided with a detachable lid containing a plastic inspection port 16 cm in diameter. The capsule resisted excess internal and external pressures up to 1.5 atm without structural damage or leaking, and also temperatures ranging from -40 to +50°C. The capsule is equipped internally with air conditioners and regenerators, automatic feeding and other apparatus, which are supported upon a metal frame. It was possible to maintain animals in a normal state of activity in the capsule for 20 days. There are 6 figures.

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BALAKHOVSKIY, I.S.; GAZENKO, O.G.; GYURDZHIAN, A.A.; GENIN, A.M.;  
KOTOVSKAYA, A.R.; SERYAPIN, A.D.; YAZDOVSKIY, V.I.

Results of investigations in an artificial satellite. Probl.  
kosm.biol. 1:359-370 '62. (MIRA 15:12)  
(SPACE FLIGHT—PHYSIOLOGICAL EFFECT)

VOLYNKIN, Yu.M.; PARIN, V.V.; YAZDOVSKIY, V.I.

Preliminary data on physiological studies during manned space  
flight. Probl.kosm. biol. 2:7-10 '62. (MIRA 16:4)  
(MANNED SPACE FLIGHT)

S/216/62/000/002/001/002  
I021/I221


AUTHOR: Sisakyan, N. M., Parin, V. V., Chernigovskiy, V. N. and Yazdovskiy, V. I.

TITLE: Problems of space biology and physiology

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Seriya biologicheskaya, no. 2, 1962, 153-162

TEXT: Lecture at the General Session of the Department of Biological Sciences.

The article deals with space biology and physiology in the USSR. Although a young science, it has already created new methods of biological experimentation, realized automatically by special devices installed on spaceships. The results of these experiments are registered and delivered to observation points on the earth. According to the authors, 3 problems are at present of great importance: 1) study of the effects of cosmic factors on living organisms of the earth, 2) study of forms of life in outer space, 3) investigations into the biological basis for securing cosmic flights and life on planets. The authors outlined 5 periods in the development of space biology in the USSR. The first was connected with biological interpretation of the data on physical characteristics of the upper layers of the atmosphere, cosmic space and flights of rockets. In the second period experiments were carried out under conditions near to those of cosmic flight. In the third—experiments were carried out on Sputnik II. It was demonstrated that life is possible under conditions free from gravity. In the fourth period biological experiments were carried out on spaceships with animals. These assembled the data



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Problems of space biology and...

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I021/I221

necessary for putting a man in to orbit. The fifth period was characterized by the flight of man in space. The authors deal further with all factors liable to affect living organism in a spaceship. They divide them into 3 groups; 1) factors connected with the dynamics of the flight-vibration, lack of gravity, 2) ultraviolet, infrared and visible parts of radiation, ionizing radiation, concentration of gases, 3) factors connected with more or less prolonged life of organisms under artificial conditions of a spaceship-isolation, lack of room in the capsule, microclimate and nutrition and rhythm of life. The authors also referred to exobiology. ✓

Card 2/2

YAZDOVSKIY, V.I.

Progress in space biology. Izv. AN SSSR. Ser. biol. no. 2:308-311  
Mr.-Ap'62. (MIRA 16:7)

(SPACE BIOLOGY)

H/016/62/000/011/001/001  
D249/D308

AUTHORS: Yazdovskiy, V.I. and Gazulov, S.A.  
TITLE: Some medical and biological problems of manned  
space flights

PERIODICAL: Fizikai Szemle, no. 11, 1962, 349-351

TEXT: The present work is a lecture given at the XIIIth International Astronautical Conference at Várná. Perspectives of research can be classified into a) the effect of space conditions on living organisms, b) the provision of living conditions during the flight, and c) study of the conditions and forms of extraterrestrial life. Point a) may be subdivided into: 1) aspects connected with the flight dynamics, e.g. acceleration, vibration, noise and weightlessness, 2) aspects arising from the properties of interplanetary space (radiation, compositions of different gas media, lack of pressure, intensity of electromagnetic field), 3) psycho-physiological and hygienic aspects of the conditions inside the space ship. Attention is concentrated on the effects of prolonged weightlessness,

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Some medical and biological ...

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cosmic radiation and on the reaction of the human organism to nervous and mental stress. A brief survey is given of some medical observations made during the flights of Soviet spacemen.

ASSOCIATION: Szovjetunió Orvostudományi Akadémiája (Academy of Medical Sciences, USSR)

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PARIN, V.V.; GAZENKO, O.G.; YAZDOVSKIY, V.I.

Possibilities of protective adaptation of the body and the limits  
of adaptation in conditions of maximal overstrain and the state of  
weightlessness. Vest.AMN SSSR 17 no.4:76-81 '62. (MIRA 15:8)  
(ADAPTATION (PHYSIOLOGY) (SPACE MEDICINE) (WEIGHTLESSNESS)

YAZDOVSKIY, V.I., prof.

Achievements and main problems of space biology. Vest.AN SSSR 32  
no.4:15-20 Ap '62. (MIRA 15:5)  
(Space biology)

YAZDOVSKIY, V.I., prof.; BAYEVSKIY, R.M., kand.med.nauk

Medicobiological control in space flight. Vest. AN SSSR 32  
no.9:9-15 S '62. (MIRA 15:9)

(SPACE MEDICINE)